

International application No.
PCT/FI 2004/000055

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G01N 1/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6286376 B1 (DAVIDSON, G P ET AL), 11 Sept 2001 (11.09.2001), see whole document --	1-8
X	DE 4005061 A1 (SALZGITTER INDUSTRIEBAU GMBH), 23 August 1990 (23.08.1990), see whole document --	1
A	US 4056324 A (GÖHDE, H), 1 November 1977 (01.11.1977), abstract --	1-8
A	US 5311290 A (OLSON, J ET AL), 10 May 1994 (10.05.1994), abstract --	1-8

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search
13 May 2004

Date of mailing of the international search report
25 -05- 2004

Name and mailing address of the ISA/
Swedish Patent Office
Box 5055, S-102 42 STOCKHOLM
Facsimile No. +46 8 666 02 86

Authorized officer
Åsa Malm /LR
Telephone No. +46 8 782 25 00

2

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/000055

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2095827 A (CENTRE SCIENTIFIQUE ET TECHNIQUE DE L'INDUSTRIE TEXTILE BELGE), 29 March 1982 (29.03.1982), abstract --	1-8
A	FI 57662 B (BOLIDEN AB), 28 June 1976 (28.06.1976), abstract --	1-8
A	EP 0604307 A1 (LYONNAISE DES EAUX-DUMEZ), 29 June 1994 (29.06.1994), abstract --	1-8
A	WO 03046518 A1 (HOLMEN AB), 5 June 2003 (05.06.2003), abstract --	1-8
A	US 4684251 A (BROUWER, G ET AL), 4 August 1987 (04.08.1987), abstract --	1-8
A	FI 110033 B (OUTOKUMPU OYJ), 10 January 2000 (10.01.2000), abstract -- -----	1-8

INTERNATIONAL SEARCH REPORT
Information on patent family members

31/03/2004

International application No.

PCT/FI 2004/000055

US	6286376	B1	11/09/2001	AT	226770	T	15/11/2002
				AU	7782898	A	30/12/1998
				DE	29802975	U	30/04/1998
				DE	69808958	D,T	27/02/2003
				EP	1021866	A,B	26/07/2000
				GB	2333836	A	04/08/1999
				GB	9801667	D	00/00/0000
				ZA	9900632	A	17/02/2000
DE	4005061	A1	23/08/1990	DE	59008504	D	00/00/0000
				EP	0382882	A	22/08/1990
				EP	0403034	A,B	19/12/1990
				SE	0403034	T3	
				ES	2070271	T	01/06/1995
US	4056324	A	01/11/1977	CH	594244	A	30/12/1977
				DE	2521236	A,B,C	18/11/1976
				GB	1507285	A	12/04/1978
US	5311290	A	10/05/1994	AU	5104793	A	26/04/1994
				CA	2145275	A,C	14/04/1994
				WO	9408223	A	14/04/1994
GB	2095827	A	29/03/1982	AU	559124	B	26/02/1987
				AU	8222982	A	07/10/1982
				BE	892719	A	30/09/1982
				CH	665480	A	13/05/1988
FI	57662	B	28/06/1976	AU	8767375	A	23/06/1977
				CA	1038197	A	12/09/1978
				DE	2558377	A,C	08/07/1976
				FI	753642	A	28/06/1976
				GB	1496614	A	30/12/1977
				SE	379424	B,C	06/10/1975
				US	3999438	A	28/12/1976
EP	0604307	A1	29/06/1994	FR	2699682	A,B	24/06/1994
WO	03046518	A1	05/06/2003	SE	520297	C	24/06/2003
				SE	0103969	A	29/05/2003
US	4684251	A	04/08/1987	AU	579230	B	17/11/1988
				AU	5499486	A	25/09/1986
				EP	0195488	A	24/09/1986
				GB	2172713	A,B	24/09/1986
				GB	8507521	D	00/00/0000
				JP	61223634	A	04/10/1986
FI	110033	B	10/01/2000	AU	758411	B	20/03/2003
				AU	3796599	A	03/02/2000
				CA	2277015	A	09/01/2000
				FI	981581	A	10/01/2000
				US	6148679	A	21/11/2000
				ZA	9904365	A	11/01/2000